FOAMULAR® CW25 XPS INSULATION

EXTRUDED POLYSTYRENE (XPS) RIGID FOAM INSULATION

Owens Corning® FOAMULAR® CW25 Extruded Polystyrene (XPS) Insulation is a closed cell, moisture resistant rigid foam board designed for cavity wall applications. Pre-cut 16’ wide boards yield fast, labor-saving installation.

Technical Information

• FOAMULAR® XPS insulation is a non-structural material and must be installed on framing which is independently braced and structurally adequate to meet required construction and service loading conditions.
• FOAMULAR® XPS insulation can be exposed to the exterior during normal construction cycles. During that time some fading of color may begin due to UV exposure, and, if exposed for extended periods of time, some degradation or “dusting” of the polystyrene surface may begin. It is best if the product is covered within 60 days to minimize degradation. Once covered, the deterioration stops, and damage is limited to the thin top surface layers of cells. Cells below are generally unharmed and still useful insulation.
• This product is combustible. A protective barrier or thermal barrier is required to separate this product from interior living or conditioned spaces as specified in the appropriate building code.
• All construction should be evaluated for the necessity to provide vapor retarders. See current “ASHRAE Handbook of Fundamentals.”

Features

SUPERIOR MOISTURE RESISTANCE
DURABLE
EASY TO CUT, FORM, & FIT

Standards, Codes Compliance

• Meets ASTM C 578 Type IV (CW25)
• UL Classification Certificate U-19712
• Code Evaluation Report UL ER8811-0112
• ASTM E 119 Fire Resistance Rated Wall Assemblies
• Meets California Quality Standards; HUD UM #71a
• Compliance verification by RADCO (AA-650)

Physical Properties

PROPERTY | TEST METHOD | VALUE
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Thermal Resistance, R-Value, \( h \times \text{ft}^-1 \times \text{F}^-\text{Btu} \) (RSI, \( ^\circ\text{C} \times \text{m}^-2 \times \text{W}^-\)) | ASTM C518 | 5.0 (0.88)

Long Term Thermal Resistance, LTTR-Value, minimum \( h \times \text{ft}^-1 \times \text{F}^-\text{Btu} \) (RSI, \( ^\circ\text{C} \times \text{m}^-2 \times \text{W}^-\)) | CAN/ULC S770-03 | 5.0 (0.88)

Compressive Strength, minimum psi (kPa) | ASTM D1621 | 25 (172)

Flexural Strength, minimum psi (kPa) | ASTM C203 | 50 (345)

Water Absorption, maximum % by volume | ASTM C272 | 0.3

Water Vapor Permeance, maximum perm (ng/Pa•s•m\(^2\)) | ASTM E96 | 1.5 (86)

Dimensional Stability, maximum % linear change | ASTM D2126 | 2.0

Flame Spread | ASTM E84 | 10

Smoke Developed | ASTM E84 | 175

Oxygen index, minimum % by volume | ASTM D2863 | 24

Service Temperature, maximum °F (°C) | - | 165 (74)

Linear Coefficient of Thermal Expansion, in/in/°F (m/m/°C) | ASTM E228 | 3.5 \times 10^-5 (6.3 \times 10^-5)

1 Properties shown are representative values for 1” thick material, unless otherwise specified.
2 Modified as required to meet ASTM C578.
3 R means the resistance to heat flow; the higher the value, the greater the insulation power. This insulation must be installed properly to get the marked R-value. Follow the manufacturer’s instructions carefully. If a manufacturer’s fact sheet is not provided with the material shipment, request this and review it carefully. R-values vary depending on many factors including the mean temperature at which the test is conducted, and the age of the sample at the time of testing. The U.S. FTC requires the R-value of home insulation to be measured at 75 degrees F mean temperature. R-value claims should always be compare at the same Mean Temperature. Because rigid foam plastic insulation products are not all aged in accordance with the same standards, it is useful to publish comparison R-value data. The R-value for FOAMULAR® XPS Insulation is provided from testing at two mean temperatures, 25°F, 40°F and 75°F, and from three aging (conditioning) techniques, 180 day real-time aged (as mandated by ASTM C578) and a method of accelerated aging sometimes called “Long Term Thermal Resistance” (LTTR) per CAN/ULC S770-03.
4 Values at yield or 10% deflection, whichever occurs first.
5 Value at yield or 5%, whichever occurs first.
6 Data ranges from 0.00 to value shown due to the level of precision of the test method.
7 Water vapor permeance decreases as thickness increases.
8 These laboratory tests are not intended to describe the hazards presented by this material under actual fire conditions.
9 Data from Underwriters Laboratories Inc.® classified. See Classification Certificate U-197.
Notes
Not for use in roofing. For roofing applications, use FOAMULAR® THERMAPINK® XPS insulation.

For additional information, refer to the Safe Use Instruction Sheet (SUIS) found in the SDS Database via http://sds.owenscorning.com.

Product availability and lead times vary by region and by product. Consult your local Owens Corning sales representative for availability and lead times.

Certifications and Sustainable Features
- Certified by SCS Global Services to contain a minimum 20% recycled content pre-consumer
- GREENGUARD Certified products are certified to GREENGUARD standards for low chemical emissions into indoor air during product usage. For more information, visit ul.com/gg
- Environmental Product Declaration (EPD) has been certified by UL Environment

Environmental and Sustainability
Owens Corning is a worldwide leader in building material systems, insulation and composite solutions, delivering a broad range of high-quality products and services. Owens Corning is committed to driving sustainability by delivering solutions, transforming markets and enhancing lives. More information can be found at www.owenscorning.com.

Disclaimer of Liability
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SCS Global Services provides independent verification of recycled content in building materials and verifies recycled content claims made by manufacturers. For more information, visit www.SCSglobalservices.com.

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